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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/723,568	11/25/2003	Marcello Lioy	030120	9933
23696 7590 02/14/2008 QUALCOMM INCORPORATED 5775 MOREHOUSE DR. SAN DIEGO, CA 92121				
			EXAMINER MATTIS, JASON E	
			ART UNIT 2616	PAPER NUMBER
			NOTIFICATION DATE 02/14/2008	DELIVERY MODE ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary

Application No.

10/723,568

Applicant(s)

LIOY ET AL.

Examiner

Jason E. Mattis

Art Unit

2616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12/4/07.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 22-29 is/are allowed.
- 6) ☒ Claim(s) 1-21, 30, and 31 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

1. This Office Action is in response to the Amendment filed 12/4/07. Claims 1-31 are currently pending in the application.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 30 and 31 are rejected under 35 U.S.C. 102(e) as being anticipated by Gloe (U.S. Publication US 2004/0083306 A1).

With respect to claims 30 and 31, Gloe discloses a network entity in a wireless communication system operating a method (**See page 6 paragraph 48 of Gloe for reference to a host node that is a portable wireless web accessing device operating a method to access the Internet**). Gloe also discloses a controller determining an operating mode of a wireless terminal when a first message with prefix information including a prefix used to derive and IP address for the terminal and a lifetime for the prefix was sent (**See pages 6-7 paragraphs 50-57, page 13 paragraph**

139, and Figures 6 and 7 of Gloe for reference to a router generating Router Advertisements periodically so that hosts continually receive new advertisements, and for reference to a host node that has not been connected to the Internet, meaning it has been in a dormant mode, determining that it has not received the latest periodical Router Advertisement and sending a Router Solicitation in response to this determination). Gloe further discloses a data processor sending a second message with updated prefix information when the terminal is in an active mode (See page 7 paragraphs 55-57 and Figure 7 of Gloe for reference to a host node receiving an updated Router Advertisement in response to the Router Solicitation, which is sent when the node is in an active mode).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ishiyama et al. (U.S. Pat. 7308495 B2) in view of Takeda et al. (U.S. Publication US 2004/0105420).

With respect to claims 1, 13, 18, 20, and 22, Ishiyama et al. discloses a terminal in a communication system operating a method (**See column 6 lines 26-40, column 10 line 35 to column 11 line 2, column 14 lines 39-60, and Figure 1 of Ishiyama et al. for reference to a host, which is a terminal apparatus, in a communication system operating a method that may be implemented using computer readable software**). Ishiyama et al. also discloses a receive data processor receiving a first message with prefix information at a first time instant with the prefix information including a prefix used to derive an IP address for the terminal and a lifetime for the prefix (**See column 5 line 66 to column 6 line 25 of Ishiyama et al. for reference to receiving a router advertisement, which is a first message, including a prefix used to derive an IP address for the host and a lifetime for the prefix**). Ishiyama et al. further discloses a transmit data processor sending a second message to solicit updated prefix information after a second time instant if a designated condition is met with the second time instant being a threshold time period from the first time instant derived based on the lifetime for the prefix and being shorter than the lifetime for the prefix (**See column 8 line 65 to column 9 line 17 of Ishiyama et al. for reference to sending a request, which is a second message, soliciting updated prefix information after a second time instant being a threshold time period derived based on the lifetime for the prefix and being shorter than the prefix**). Ishiyama et al. does not specifically disclose using a wireless terminal in a wireless communication system.

With respect to claim 21, Ishiyama et al. discloses a method of receiving IPv6 Router Advertisements in a communication system **(See column 1 lines 26-32, column 5 line 66 to column 6 line 25, and column 9 lines 2-17 of Ishiyama et al. for reference to receiving IPv6 router advertisements in a communication system)**. Ishiyama et al. also discloses receiving a Router Advertisement with prefix information at a first time instant with the prefix information including a prefix used to derive an IPv6 address for a terminal and a lifetime for the prefix **(See column 5 line 66 to column 6 line 25 of Ishiyama et al. for reference to receiving a router advertisement, which is a first message, including a prefix used to derive an IPv6 address for a host and a lifetime for the prefix)**. Ishiyama et al. further discloses waiting a threshold time period, derived based on the lifetime for the prefix and being shorter than the prefix, after receiving the Router Advertisement and sending a Router Solicitation to solicit updated prefix information after a second time instant that is the threshold time period from the first time instant if the terminal is active **(See column 8 line 65 to column 9 line 17 of Ishiyama et al. for reference to sending a request, which is a router solicitation, soliciting updated prefix information after a second time instant being a threshold time period derived based on the lifetime for the prefix and being shorter than the prefix)**. Ishiyama et al. does not specifically disclose using a wireless terminal in a wireless communication system.

With respect to claims 1, 13, 18, and 20-22, Takeda et al., in the field of communications, discloses using wireless terminals in a wireless communication system **(See page 4 paragraphs 69-71 and Figure 1 of Takeda et al. for reference to**

using mobile terminals in a wireless communication system). Using wireless terminals in a wireless communication system has the advantage of allowing devices to be connected to a network without a physical wire attachment to the network.

It would have been obvious for one of ordinary skill in the art at the time of the invention, when presented with the work of Takeda et al., to combine using wireless terminals in a wireless communication system, as suggested by Takeda et al., with the system and method of Ishiyama et al., with the motivation being to allow devices to be connected to a network without a physical wire attachment to the network.

With respect to claims 3, 4, 10, 11, and 15, Ishiyama et al. does not disclose the condition being met if the terminal is active, has an air-link connection established, has an always-on data session, or if there is data activity during the threshold time period.

With respect to claims 3, 4, 10, 11, and 15, Takeda et al. discloses a condition to updated address information being met if the terminal is active, has an air-link connection established, has an always-on data session, or if there is data activity during the threshold time period **(See page 11 paragraphs 171-175 for reference to the condition to update address information being met if a new SIP request messages has been sent meaning the terminal is active, with a current air-link connection, or in an always-on data session with current data activity).** Soliciting updated address information after a threshold time period that is shorter than an address lifetime if a designated condition is met has the advantage of making sure

current address lifetimes do not expire while a wireless terminal is still actively using the current address.

It would have been obvious for one of ordinary skill in the art at the time of the invention, when presented with the work of Takeda et al. to combine soliciting updated address information after a threshold time period that is shorter than an address lifetime if a designated condition is met, as suggested by Takeda et al., with the system and method of Ishiyama et al., with the motivation being to make sure current address lifetimes do not expire while a wireless terminal is still actively using the current address.

With respect to claims 2, 14, and 19, Ishiyama et al. discloses that the first message is a Router Advertisement in IPv6 and the second message is a Router Solicitation in IPv6 (See column 1 lines 26-32, column 5 line 66 to column 6 line 25, and column 9 lines 2-17 of Ishiyama et al. for reference to receiving IPv6 router advertisements and sending requests, which are router solicitations, for updated prefix advertisements).

With respect to claims 5-8, Ishiyama et al. discloses a controller operative to derive the threshold time period based on the lifetime of the prefix and a timer operative to expire at the end of the threshold time period, with the threshold time period being a percentage of the lifetime period or the time period of the lifetime minus a fixed amount of time (See column 9 lines 2-12 of Ishiyama et al. for reference to deriving a threshold based on the lifetime of a prefix and using a time to count down the threshold with the threshold being a fixed value less than the lifetime, meaning it

is the time period of the lifetime minus a fixed amount of time, or the threshold being obtained by multiplying a constant n less than one to the lifetime, meaning it is a percentage of the lifetime).

With respect to claims 9 and 16, Ishiyama et al. discloses sending a third message with the updated prefix information and updating the threshold based on the updated lifetime of the updated prefix information (See column 8 line 65 to column 9 line 17 of Ishiyama et al. for reference to receiving the updated prefix information with updated lifetime information such that a new threshold period of time is determined corresponding to the new prefix information).

With respect to claims 12 and 17, although the combination of Ishiyama et al. and Takeda et al. does not specifically disclose the system being a CDMA system, using CDMA for wireless communication is old and well known in the art of communication. It would have been obvious for one of ordinary skill in the art at the time of the invention to combine using a CDMA system with Ishiyama et al. and Takeda et al., with the motivation being to efficiently divide the wireless spectrum into channels for data transmission.

Allowable Subject Matter

6. Claims 23-29 are allowed.

Response to Arguments

7. Applicant's arguments filed 12/4/07 have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of difference sections of Gloe, newly cited Ishiyama et al., and Takeda et al.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason E. Mattis whose telephone number is (571) 272-3154. The examiner can normally be reached on M-F 8AM-5:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy Vu can be reached on (571) 272-3155. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Application/Control Number:
10/723,568
Art Unit: 2616

Page 10

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A handwritten signature in black ink, appearing to be 'JEM' followed by a long horizontal stroke.

jem

Jason E Mattis
Examiner
Art Unit 2616